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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/072,323	10/23/2001	Jeffrey L. Kodosky	5150-46000	3183

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EXAMINER

BAYERL, RAYMOND J

ART UNIT PAPER NUMBER

2173

DATE MAILED: 02/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/072,323	KODOSKY, JEFFREY L.	
	Examiner	Art Unit	
	Raymond J. Bayerl	2173	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 December 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 48 - 79 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 48 - 79 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 October 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. Claims 49, 52 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is not clear just what applicant means, when claim 49 concludes “in response to the user input received to the user interface element to.” What is it, that follows the word “to”? Is this something that “changing characteristics” does? Is it what “the user input” does?

In claim 52, “said including the user interface element in the program” does not have clear antecedent basis in parent claim 48, which does not first recite a step of “including...”. It is not until claim 53 that “including the user interface element in a program” takes place.

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 48 – 57, 59 – 71, 74 – 79 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawachi et al. (“Kawachi”; US #6,690,981 B1, filed 4 May 2000) in view of King et al. (“King”; US #2003/0,071,845 A1, filed 12 October 2001).

As per forming an association to “a user interface element” in independent claim 48 (see also independent claim 67), Kawachi, in ENCAPSULATING USER INTERFACE

CODE FOR A GRAPHICAL PROGRAM, will produce a sub-program of a graphical program in which

A node referencing a user interface element of a graphical program may be connected to a node referred to as a “property node”. The user may configure the property node with information specifying which property or set of properties of the referenced user interface element to set or retrieve (Abstract).

In Kawachi, the user may select the control, e.g., by clicking on the control, and may then issue a command to create a reference to the control (col 11, line 42 – col 12, line 7; figs 9, 11). This means that “displaying the user interface element” and “receiving user input” to associate the property node in the sub-program will occur in Kawachi.

The subprogram in Kawachi will create an access to a subprogram that calculates the desired new size and position, and another property node then sets the size and position of the user interface element referenced (col 10, line 54 – col 11, line 21). This further means that Kawachi’s sub-program is directed to controlling “an appearance that is separate from any data displayed in the user interface element” and that the sub-program association “is operable to change characteristics affecting the appearance of the user interface element”.

While the referenced property node in Kawachi will incorporate a certain structure of user interface code into a graphical program to generate a user interface panel (Abstract), Kawachi does not **explicitly** teach that a “first block diagram” is associated with the corresponding “user interface element”.

However, King, in ENABLING A GRAPHICAL PROGRAM TO RESPOND TO USER INTERFACE EVENTS will include a portion of graphical source code (such as a plurality of interconnected nodes) in the block diagram, where the portion of graphical source code is operable to receive and respond to the respective user interface event (Abstract; paragraph [0023]). A “first block diagram” is specifically referenced in King, when a sub-program node may comprise a node that is included in the block diagram, wherein the node specifies or represents a separate block diagram (paragraph [0024]), this “block diagram” being operable to affect the operation of “the user interface element” to which it is linked.

Thus, it would have been obvious to a person having ordinary skill in the art at the time of applicant’s invention to connect a “user interface element” to such programming as that which will “change characteristics affecting the appearance of the user interface element” as in the sub-program association via a property node in Kawachi, but also with this associated programming taking the form of a “block diagram” as in King, so that the user/developer of the overall arrangement has a greater flexibility and capacity for detailed instruction, for specifying the nature of the “user interface element”. Motivation rests at least in Kawachi, where the provision of properties of the user interface element takes the form of user interface code association in a graphical program. Given this environment, should the Kawachi user encounter a situation in which detailed control is required for the “user interface element”, Kawachi would already have a graphical programming set-up in place, of the kind that accept definitions of a “block diagram” as per King.

As in claim 49 (see also claims 64, 70, 76), Kawachi is seen as “receiving user input to the user interface element” by clicking on the control to create a reference to the control (e.g., fig 9’s Create option descending from the Numeric “user interface element”). Because such parameters as size and position may be set, this “input”, when extended to King, will result in “the first block diagram changing characteristics affecting the appearance of the user interface element”. Clearly, the Kawachi user interface element will be “one of: a user interface control; or a user interface indicator” (claim 50).

King’s separate block diagram is “a graphical data flow diagram” as in claim 51.

In Kawachi’s Create dialog, “user input for editing the first block diagram” (claim 52) is received, when Kawachi expands to “block diagram” use. The reference to the control in Kawachi will then result from “editing” for “changing how the first block diagram changes characteristics affecting the appearance”. This “changing” will take place during “executing the program” (claims 53, 68) that is created, in both the Kawachi and King graphical programming environments. Because clicking on the control is used in Kawachi to enter a reference to the control, Kawachi’s “executing” involves “receiving user input to the user interface element during execution of the program” (claims 54, 69), and the “block diagram” specifically suggested by King for such a purpose is for “controlling functionality of the user interface element” (claim 55) when used in Kawachi.

Both Kawachi and King teach the addition of programming instructions to a larger “graphical program”. In so doing, there will be “a second block diagram” to the one

provided for in King, this being “separate from the first block diagram” (claim 56). In producing a “user interface element” for that “graphical program”, “the first block diagram” (for the interface) “is accessible from the second block diagram” (that provides the substance inserted into the element), as in claim 57. To associate a property node as in Kawachi will “change a manner in which data is displayed in the user interface element” (claims 59, 61, 71), as in varying size and position.

Independent claim 60 is similar in many ways to claim 48, and applicant should refer to the above discussion of the applicability of Kawachi/King. (See also the similar independent claim 74.) The recitations concerning “a second block diagram” that “is separate from the first block diagram” is similar to what is found in claim 56, but Kawachi’s inclusion of a sub-program in the style of King’s “first block diagram” will result in a “graphical program” that has property assignment that occurs separately from the underlying “program” that drives the “user interface element”.

As in claim 62, when such a combination operates, the “second block diagram” for the underlying driving processes will “provide data to the user interface element”, and the “user interface element”’s separate “first block diagram” will “receive the data” and produce an interpretation of how it is to be displayed (and thus “change a visual appearance”, claims 63, 75). This is the result of “including the first block diagram...in the graphical program” (claim 65).

Independent claim 66 is generally similar to claim 60 as discussed above, and a similar line of reasoning applies. (See also the similar independent claim 77). The Kawachi/King combination will have “a main block diagram” that is connected to “the

block diagram associated with the user interface element”, when a sub-program is associated specifically with the user interface element (Kawachi, Abstract).

Independent claim 78 generally resembles independent claim 48, and a similar line of reasoning applies. A “plurality of user interface elements” are displayed in this claim, but plural such “elements” can be supported in the graphical programming arrangements of both Kawachi and King. These will “comprise a plurality of primitive user interface controls provided by an application development environment” (claim 79).

5. Claims 58, 72 – 73 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawachi in view of King and Kodosky et al. (“Kodosky”; US #5,301,301, patent date 5 April 1994).

As per claim 58, while the Kawachi association with a “user interface element” via King’s “first block diagram” suggests a certain form of modularity in the programming units, Kawachi/King does not **explicitly** teach “copying the user interface element from a first graphical program to a second graphical program”, for the purpose of “automatically including the first block diagram in the second graphical program”.

However, Kodosky, as has been noted in previous actions, is such that a LabVIEW user can create VIs which can be used as building blocks in other VIs (col 4, lines 41 - 52). To facilitate location of these VIs the user can place them in a vi.lib subfolder, so as to create a palette menu (a 2-D pictorial representation of the collection of VIs).

Thus, it would also have been obvious to the person having ordinary skill in the art to have a “copying” function employing Kodosky’s palette menu to access building

blocks, so as to replicate a “user interface element” supplied via a “first block diagram”, as in the Kawachi/King combination, because this increases still further the extent of options available to a Kawachi developing user. Just as Kawachi would be motivated by King to include separate “block diagram” specifications, Kawachi would further be motivated to adapt once-created “user interface” elements to re-use by “copying” to a new program, so as to have a greater selection of items from which to specify the “graphical program” instances being worked upon.

A similar line of reasoning applies to claims 72 – 73.

6. Applicant's arguments with respect to claims 48 – 79, filed 9 December 2005, have been considered but are moot in view of the new ground(s) of rejection.

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Raymond J. Bayerl whose telephone number is (571) 272-4045. The examiner can normally be reached on M - Th from 9:00 AM to 4:00 PM ET.

9. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Cabeca, can be reached on (571) 272-4048. All patent application related correspondence transmitted by FAX **must be directed** to the central FAX number (571) 273-8300.

10. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-2100.


RAYMOND J. BAYERL
PRIMARY EXAMINER
ART UNIT 2173
16 February 2006